

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/695,119	10/28/2003	James W. Blease	85683D-W	6097
7590 06/15/2005			EXAMINER	
Paul A. Leipold			KLEMANSKI, HELENE G	
Eastman Kodak Patent Legal Sta		ART UNIT	PAPER NUMBER	
343 State Street			1755	
Rochester, NY 14650-2201			DATE MAILED: 06/15/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		170
	Application No.	Applicant(s)
	10/695,119	BLEASE ET AL.
Office Action Summary	Examiner	Art Unit
	Helene Klemanski	1755
The MAILING DATE of this communication appeared for Reply	opears on the cover sheet with	the correspondence address
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory perior  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	. 136(a). In no event, however, may a reply ply within the statutory minimum of thirty (3 d will apply and will expire SIX (6) MONTHS tte, cause the application to become ABANI	be timely filed  D) days will be considered timely.  From the mailing date of this communication.  DONED (35 U.S.C. § 133).
Status	•	
1)☐ Responsive to communication(s) filed on 2a)☐ This action is FINAL. 2b)☒ Th 3)☐ Since this application is in condition for allow closed in accordance with the practice under	is action is non-final. ance except for formal matters	•
Disposition of Claims		
4)  Claim(s) 1-19 is/are pending in the application 4a) Of the above claim(s) is/are withdred is/are allowed.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-19 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and are subject to restriction and are subjected to by the Examing subjected to by the Examing subjected to by the Examing subjected to a policial may not request that any objection to the Replacement drawing sheet(s) including the corresponding subjected to by the Examing subjected to any objection to the Replacement drawing sheet(s) including the corresponding subjected to by the Examing subjected su	awn from consideration.  for election requirement.  her.  ccepted or b) objected to by e drawing(s) be held in abeyance.  ction is required if the drawing(s)	See 37 CFR 1.85(a). is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Bure * See the attached detailed Office action for a list	nts have been received. Ints have been received in Application of the control of	lication No ceived in this National Stage
Attachment(s)		
1) ☑ Notice of References Cited (PTO-892) 2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 2/4/04&4/13/05.		mary (PTO-413) lail Date mal Patent Application (PTO-152)

#### **DETAILED ACTION**

### Specification

1. The disclosure is objected to because of the following informalities: the Cross Reference to Related Applications on page 1 of the specification needs to be updated.

Appropriate correction is required.

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: (1) no literal antecedent basis is seen for any of the subject matter in claims 6-14; (2) no literal antecedent basis is seen for the phrase "wherein the organic solvent is selected from glycerol, diethylene glycol, diethylene glycol monobutyl ether, triethylene glycol monobutyl ether, 2-pyrrolidone, urea and mixtures thereof" in claim 16 (see page 7, lines 1-9 of the specification which discloses that these solvents are humectants and does not specify that they are choices for the organic solvent) and (3) no literal antecedent basis is seen for the phrase "wherein the concentration of organic solvents, and humectants is 5% to 50% by weight and water is 50% to 95% by weight" in claim 17 (see page 6, lines 27-30 and page 7, lines 10-17 of the specification which discloses that the organic solvents and humectants are present in an amount of 5-60% by weight).

The examiner suggests (1) the incorporation of the subject matter from claims 614 into the specification, (2) to specify that the solvents disclosed on page 7 of the
specification are choices for the organic solvent and (3) the amount of the organic
solvents and humectants correspond in the claims and specification.

Application/Control Number: 10/695,119 Page 3

Art Unit: 1755

### Claim Objections

3. Claims 1, 4, 16 and 19 are objected to because of the following informalities: in claim 4, line 4, the term "or" should be replaced with a comma and in claim 16, line 3, the phrase "diethylene glycol\_mono-butyl ether" should be replaced with the phrase "diethylene glycol monobutyl ether".

The following phrase is also being objected to because of the following reason:

(1) in claims 1 and 19, the phrase "preferably AI, Co, Cr, Cu, Fe or Ni"

Applicants should note that the terms "preferably", "more preferably" and "such as" and the phrases that follow them do not further limit the claims. For example, in claim 1, it is the examiner's position that the Met substituent is any metal atom and the remaining metals after the term "preferably" does not extend the scope of that claim. The examiner suggests the deletion of the above phrase and adding the limitation as a new dependent claim. Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1, 2, 4, 16 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 19, the phrase "D) a trisazo black dye of the following structure....M is ammonium, H, K, Li or Na" is considered vague and indefinite since it is unclear whether the black dye is a component of the yellow ink (as the claim now suggests) or if the component D of the ink set is a black ink containing the black dye (as suggested by the specification on page 4). It appears to the examiner that applicants intended to claim an ink set including a black ink containing the black dye of the formula as claimed and examined as such. Please clarify.

In claim 2, the phrase "wherein the dye is present in the ink in a concentration of 0.1% to 15% by weight of the ink composition" is considered confusing since it is unclear as to which dye from claim 1 applicants are referring to that is present in the ink. Is each dye in each ink present in that amount or is it a specific dye in a specific ink that is present in this amount? The examiner assumed applicants intended that each dye on each ink is present in this amount and examined as such. Please clarify.

In claim 4, the terms "Kodak Lightfast Magenta 1 (CAS #251959-65-6)", "CAS #182061-89-8", "Nippon Kayaku JPD EK-1 (CAS #224628-70-0)" and "CAS #212080-60-9" are considered indefinite since the relationship between a trademark and the product it identifies is sometimes indefinite, uncertain or arbitrary. The formula or characteristics of the product may change from time to time and yet it may be sold under the same trademark. In the claims, every element or ingredient of the ink should be set forth in positive, exact, intelligible language, so that there will be no uncertainty as to what is meant. Arbitrary trademarks, which are liable to mean different things at

the pleasure of manufactures, do not constitute such language. See Ex parte Kattwinkel, 12 U.S.P.Q. 11 and MPEP 608.01(v).

In claim 16, the phrase "selected from" is considered indefinite since this is improper Markush language. It is the examiner's position that other materials could be present in the Markush group that were not intended by applicants by the use of the phrase "selected from" since this phrase does not exclude other materials. The examiner suggests the language "selected from the group consisting of" in place of this phrase.

## **Double Patenting**

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, 8, 14-21 and 23 of copending Application No. 10/695,165 (US 2005/0087099). Although the conflicting claims are not identical, they are not patentably distinct from each other

because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

# Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1-5 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/094943 (US 2004/0128775 is English equivalent).

WO 02/094943 teaches dye mixtures consisting essentially of one or more dyes of the formula

$$N=N$$

$$N=N$$

$$SO_3M$$

$$SO_3M$$

wherein Y is H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or halo; R<sup>1</sup> is OM, CH=CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>OR<sup>2</sup>, CH<sub>2</sub>CH<sub>2</sub>NR<sup>3</sup>R<sup>4</sup>, CH<sub>2</sub>CH<sub>2</sub>SR<sup>5</sup> or CH<sub>2</sub>CH<sub>2</sub>CR<sup>6</sup>R<sup>7</sup>R<sup>8</sup>; R<sup>2</sup> is H, SO<sub>3</sub>M, C<sub>1</sub>-C<sub>6</sub> alkyl, etc.; R<sup>3</sup> to

R<sup>8</sup> are H, C<sub>1</sub>-C<sub>6</sub> alkyl, etc.; M1 is Cu, Co, Ni, Fe, Cr or Al and M is H or a monovalent metal cation and one or more dyes of the formula

wherein  $R^9$  is a  $C_6$ - $C_{14}$  aryl substituted one or more times by OM, O( $C_1$ - $C_6$ ) alkyl, COOM, SO<sub>3</sub>M or NH<sub>2</sub>; R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> are identical or different and are H, O( $C_1$ - $C_6$ ) alkyl, ( $C_1$ - $C_6$ ) alkyl, COOM or SO<sub>3</sub>M; R<sup>14</sup> is phenyl, pyridyl or pyrazole radical substituted one or more times by OM, O( $C_1$ - $C_6$ ) alkyl, COOM, SO<sub>3</sub>M or NH<sub>2</sub>, NH( $C_6$ - $C_{10}$ ) aryl, NH( $C_1$ - $C_6$ ) acyl or phenylsulfo; M2 is Al, Cr, Fe, Co, Ni or Cu; R<sup>15</sup> is ( $C_1$ - $C_6$ ) alkyl, n is 0 or 1; X is a chemical bond, -CO- or -SO<sub>2</sub>- and M is H or a monovalent metal cation. WO 02/094943 further teaches an ink jet ink composition comprising 0.1-50% by weight of the above dye mixture, 0-99% by weight water, 0.5-99.5% by weight of organic solvent and/or humectants such as glycerol, diethylene glycol, triethylene glycol, urea etc. and optionally a nonionic surfactant. The above ink jet ink composition may also be used as the black ink in an ink set. The ink set additionally comprises a magenta ink containing a magenta dye such as Reactive Red 23 (i.e. anthrapyridone, metal complex or azo-naphthol magenta dye), a cyan ink containing a cyan dye such as Direct Blue 199 (i.e. sulfonated copper phthalocyanine dye) and a yellow ink containing a yellow

dye such as Direct Yellow 86 or Direct Yellow 132 (i.e. azo-aniline or metal complex yellow dye). The above ink and ink set may be used in typical ink jet printing processes. See paras. 0012-0045, formulas (5e), (5f), (5g), (5i) and (5k), para. 0052, paras. 0057-0060, para. 0065, examples 1-10 and claims 1, 4 and 8-12 of US 2004/0128775. WO 02/094943 fails to specifically exemplify an ink set comprising a cyan ink comprising a sulfonated copper phthalocyanine dye, a magenta ink comprising an anthrapyridone, metal complex or azo-naphthol magenta dye, a yellow ink comprising an azo-aniline or metal complex yellow dye or a black ink comprising the above trisazo dye as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific ink jet ink set as claimed by applicants as WO 02/094943 also discloses the use of this ink jet ink set but fails to show an example incorporating them.

10. Claims 1-5 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geisenberger et al. ('674).

Geisenberger et al. ('674) teach metal complex trisazo dyes of the formula

wherein R<sup>1</sup> is an aryl substituted one or more times by OH, O(C<sub>1</sub>-C<sub>6</sub>) alkyl, COOM, SO<sub>3</sub>M or NH<sub>2</sub>; R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are identical or different and are H, O(C<sub>1</sub>-C<sub>6</sub>) alkyl, (C<sub>1</sub>-C<sub>6</sub>) alkyl, COOM or SO<sub>3</sub>M; R<sup>6</sup> is phenyl, pyridyl or pyrazole radical substituted one or more times by OH, O(C<sub>1</sub>-C<sub>6</sub>) alkyl, COOM, SO<sub>3</sub>M or NH<sub>2</sub>, NHaryl, NHacyl or phenylsulfo; M<sup>1</sup> is Al, Cr, Fe, Co, Ni or Cu;  $R^{20}$  is (C<sub>1</sub>-C<sub>6</sub>) alkyl, n is 0 or 1; X is a chemical bond, -CO- or -SO<sub>2</sub>- and M is H or a monovalent metal cation. Geisenberger et al. ('674) further teach an ink jet ink composition comprising 0.1-50% by weight of the above dye, 0-99% by weight water, 0.5-99.5% by weight of organic solvent and/or humectants such as glycerol, diethylene glycol, triethylene glycol, urea etc. and optionally a nonionic surfactant. The above ink jet ink composition may also be used as the black ink in an ink set. The ink set additionally comprises a magenta ink containing a magenta dye such as Reactive Red 23 (i.e. anthrapyridone, metal complex or azo-naphthol magenta dye), a cyan ink containing a cyan dye such as Direct Blue 199 (i.e. sulfonated copper phthalocyanine dye) and a yellow ink containing a yellow dye such as Direct Yellow 86 or Direct Yellow 132 (i.e. azo-aniline or metal complex yellow dye). The above ink and ink set may be used in typical ink jet printing processes. See col. 3, line 20 - col. 4, line 61, compound formulas (8)-(10) and (12), col. 10, lines 43-48, col. 11, line 15 - col. 12, line 18, examples 1, 3, 4, 8, 9 and 11 and claims 1-8 and 11-14. Geisenberger et al. ('674) fail to specifically exemplify an ink set comprising a cyan ink comprising a sulfonated copper phthalocyanine dye, a magenta ink comprising an anthrapyridone, metal complex or azo-naphthol magenta dye, a yellow ink comprising an azo-aniline or

metal complex yellow dye or a black ink comprising the above trisazo dye as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific ink jet ink set as claimed by applicants as Geisenberger et al. ('674) also discloses the use of this ink jet ink set but fails to show an example incorporating them.

#### Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/695,119

**Art Unit: 1755** 

Page 11

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free)

lelene Klemanski

Primary Examiner

Art Unit 1755

, HK | June 13, 2005